

ABSTRACT

A method for pelletizing and taking intensive measurements of a raw sample is disclosed. The method includes homogenizing and pelletizing the sample that is to be subjected to compositional or intensive analysis. The raw sample is mixed with several solutions containing epoxies and activators based in carrier solutions or solvents, and ground to a fine powder or gel. The gel is partially dried and conformed to a pellet shape. The pellet is then cured such that the epoxy and activator solutions react and form a binding agent capable of maintaining the structural integrity of the sample pellet during intensive analysis. An intensive analysis instrument, such as LIBS, may then be used to ablate the surface of the pellet. The pellet provides consistent ablation of the sample material for accurate intensive measurements.